

RAW SEQUENCE LISTING

DATE: 07/11/2001

PATENT APPLICATION: US/09/392,682A

TIME: 14:56:58

Input Set : N:\Cr3\RULE60\09392682A.txt

Output Set: N:\CRF3\07112001\I392682A.raw

#13
7/11/01
7/30/01

3 <110> APPLICANT: Gruenert, Deiter C.
 4 Kunzelmann, Karl
 6 <120> TITLE OF INVENTION: GENE THERAPY BY SMALL FRAGMENTS HOMOLOGOUS REPLACEMENT
 8 <130> FILE REFERENCE: 480.18-1(HV)
 10 <140> CURRENT APPLICATION NUMBER: 09/392,682A
 11 <141> CURRENT FILING DATE: 1999-09-09
 13 <150> PRIOR APPLICATION NUMBER: 08/487,799
 14 <151> PRIOR FILING DATE: 1995-06-07
 16 <150> PRIOR APPLICATION NUMBER: 07/933,471
 17 <151> PRIOR FILING DATE: 1992-08-21
 19 <150> PRIOR APPLICATION NUMBER: 08/409,544
 20 <151> PRIOR FILING DATE: 1995-03-24
 22 <160> NUMBER OF SEQ ID NOS: 87
 24 <170> SOFTWARE: PatentIn Ver. 2.0
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 2908
 28 <212> TYPE: DNA
 29 <213> ORGANISM: human
 32 <400> SEQUENCE: 1

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35 ctctagcctg ggtgacagag tgagactctg tctctaaata aataaataaa taaataaata 180
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38 attactttat ttattagctt taaatgatac cttttgactt tcagcttttc ttaataaaagc 360
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41 aactcgaatt ctgccattag ttttaatttt tgttcacagt tatataaatc tttgttctact 540
42 gatagtcctt ttgtactatc atctcttaaa tgactttata ctccaagaaa ggctcatggg 600
43 aacaatatta cctgaatatg tctctattac ttaatctgta cctaataata tgaaggtaat 660
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61 gcctaattgga atgagcattg atctgccagc agagaattag aggggtaaaa ttgtgaagat 1740
62 attgtatccc tggctttgaa caaataccat ataacttcta gtgactgcaa ttctttgatg 1800
63 cagaggcaaa atgaagatga tgtcattact catttcacaa caatattgga gaatgagcta 1860
64 attatctgaa aattacatga agtattccaa gagaaaccag tatatggatc ttgtgctgtt 1920
65 cactatgtaa attgtgtgat ggtgggttca gtagttattg ctgtaaatgt tagggcaggg 1980
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69 tggattagat agaaatggca attcttataa aaagggttgc atgcttacat gaatggcttt 2220
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76 gtatgtgttt tcccatagga attaatattt aaatggtggt ttgatttcct caagtcaacc 2640
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79 gggaaatacca aattgaataa gacatagtct atttttctga aggggtttata gcagagtccc 2820
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81 ataatgaaaa aaggagaaga gggaattc 2908

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84 <211> LENGTH: 20

85 <212> TYPE: DNA

86 <213> ORGANISM: Artificial Sequence

88 <220> FEATURE:

89 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic

90 oligonucleotide

92 <400> SEQUENCE: 2

93 gcagagtacc tgaaacagga

20

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96 <211> LENGTH: 22

97 <212> TYPE: DNA

98 <213> ORGANISM: Artificial Sequence

100 <220> FEATURE:

101 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic

102 oligonucleotide

104 <400> SEQUENCE: 3

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22

107 <210> SEQ ID NO: 4

108 <211> LENGTH: 20

109 <212> TYPE: DNA

110 <213> ORGANISM: Artificial Sequence

112 <220> FEATURE:

113 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic

114 oligonucleotide

116 <400> SEQUENCE: 4

117 cattcacagt agcttaccga

20

119 <210> SEQ ID NO: 5

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120 <211> LENGTH: 22
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122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
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129 ccacatatca ctatatgcat gc                                22
131 <210> SEQ ID NO: 6
132 <211> LENGTH: 22
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
138     oligonucleotide
140 <400> SEQUENCE: 6
141 ccattaaaga aaatatcatt gg                                22
143 <210> SEQ ID NO: 7
144 <211> LENGTH: 22
145 <212> TYPE: DNA
146 <213> ORGANISM: Artificial Sequence
148 <220> FEATURE:
149 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
150     oligonucleotide
152 <400> SEQUENCE: 7
153 ccattaaaga aaatatcatt gg                                22
155 <210> SEQ ID NO: 8
156 <211> LENGTH: 20
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
162     oligonucleotide
164 <400> SEQUENCE: 8
165 ataggaaaca ccaaagatga                                20
167 <210> SEQ ID NO: 9
168 <211> LENGTH: 20
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
174     oligonucleotide
176 <400> SEQUENCE: 9
177 ataggaaaca ccaatgatat                                20
179 <210> SEQ ID NO: 10
180 <211> LENGTH: 22
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:

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186     oligonucleotide
188 <400> SEQUENCE: 10
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193 <212> TYPE: DNA
194 <213> ORGANISM: Artificial Sequence
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197 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
198     oligonucleotide
200 <400> SEQUENCE: 11
201 ctgtattttg tttattgctc caa                                23
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204 <211> LENGTH: 22
205 <212> TYPE: DNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
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210     oligonucleotide
212 <400> SEQUENCE: 12
213 gagggatttg gggaattatt tg                                22
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216 <211> LENGTH: 22
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
222     oligonucleotide
224 <400> SEQUENCE: 13
225 cttgctaaag aaattcctgc tc                                22
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228 <211> LENGTH: 19
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
234     oligonucleotide
236 <400> SEQUENCE: 14
237 caccaaagat gatattttc                                    19
239 <210> SEQ ID NO: 15
240 <211> LENGTH: 20
241 <212> TYPE: DNA
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
246     oligonucleotide
248 <400> SEQUENCE: 15
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Input Set : N:\CrF3\RULE60\09392682A.txt

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253 <212> TYPE: DNA
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257 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
258 oligonucleotide
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261 cttttcctgg attatgcctg gcac 24
263 <210> SEQ ID NO: 17
264 <211> LENGTH: 24
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
270 oligonucleotide
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273 actgtagctg tactaccttc catc 24
275 <210> SEQ ID NO: 18
276 <211> LENGTH: 25
277 <212> TYPE: DNA
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
282 oligonucleotide
284 <400> SEQUENCE: 18
285 gacaattaca atacagtgtg acaag 25
287 <210> SEQ ID NO: 19
288 <211> LENGTH: 25
289 <212> TYPE: DNA
290 <213> ORGANISM: Artificial Sequence
292 <220> FEATURE:
293 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
294 oligonucleotide
296 <400> SEQUENCE: 19
297 gggttcattt gatcacaata aatgc 25
299 <210> SEQ ID NO: 20
300 <211> LENGTH: 25
301 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequence
304 <220> FEATURE:
305 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
306 oligonucleotide
308 <400> SEQUENCE: 20
309 cagcttttct taataaagca atcag 25
311 <210> SEQ ID NO: 21
312 <211> LENGTH: 24
313 <212> TYPE: DNA
314 <213> ORGANISM: Artificial Sequence

VERIFICATION SUMMARY

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Input Set : N:\Crf3\RULE60\09392682A.txt

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